



The anatomy of a collaborative writing tool for public participation in democracy

Roberto Casati, Gino Roncaglia

► To cite this version:

Roberto Casati, Gino Roncaglia. The anatomy of a collaborative writing tool for public participation in democracy. 2007. [ijn_00184564](https://hal.science/ijn_00184564)

HAL Id: [ijn_00184564](https://hal.science/ijn_00184564)

https://hal.science/ijn_00184564

Preprint submitted on 31 Oct 2007

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

The anatomy of a collaborative writing tool for public participation in democracy

Roberto Casati (CNRS Institut Jean Nicod, Ecole Normale Supérieure et Ecole des Hautes Etudes en Science Sociales, Paris, France; roberto.casati AT ens.fr)

Gino Roncaglia (Department of Human Sciences , University of La Tuscia, Viterbo, Italy; roncagl AT unitus.it)

Version: October 31, 2007. An earlier Italian version of the paper was presented at the Conference "Documentalità: l'ontologia degli oggetti sociali", Torino, Fondazione Rosselli, 25-26 January 2007, and has been published in the Rivista di Estetica, 2007.

0. Foreword

This paper aims to present a synthetic but reasonably comprehensive discussion concerning an idea which is, after all, quite simple: the possibility of using Internet collaborative working tools to craft legislative measures and, more specifically, draft laws.

It is well known that Internet tools offer excellent potential for increasing transparency in the different phases of the law making process, for making regulations more easily available and accessible, and for allowing better coordination among their authors. Just to mention an Italian example, the project "Norme in Rete"¹ (Laws on the Web) is based upon these considerations and, in just a few years, has become an important point of reference for law making.

Another familiar idea is that of using specific IT tools such as editors and markup languages to write laws so as to standardize some of their structural features and improve their description and searchability by applying adequate metainformation.

However, it seems that so far citizens have been involved more as recipients of information rather than as individuals to be engaged in law making activities. In other words, the tools currently available seem to meet the needs for a more efficient, transparent, and exacting law making system, but they have not yet taken a step further towards a system that allows greater public participation.

1. Public participation in policy making: which tools are required?

In the last few years, much has been said about the potential of the new Information and communication technology for fostering the development of forms of public participation in democratic policy making. The OECD report *Citizens as Partners. Information, Consultation and Public Participation in Policy Making*² identifies three levels of citizens'

¹ <http://www.normeinrete.it>. The last access to all the sites mentioned here dates back to January 25, 2006. The last access to the Wikipedia list of reference links has the same date.

² OECD Report *Citizens as Partners. Information, Consultation and Public Participation in Policy Making*, 2001, available online from the site <http://www1.oecd.org/publications/e-book/4201131E.PDF>.

participation in policy making: information, consultation and active participation. As regards active participation, which is the focus of this paper, the report states that active political participation “recognizes the capacity of citizens to discuss and generate policy options independently”³, without modifying the representative mechanisms entrusted with the deliberation and adoption of specific policy measures.

However, the steps taken in this direction by associations, movements and individuals who are not often involved in traditional institutional politics seem to clash with two extremely important issues: 1) the *available tools*, which often seem to be more suited to discussions more than to practical and rigorous policy formulation and negotiations aimed at reaching an agreement on the shared texts ; 2) the *information, experience and training* of the people involved, which play a crucial role in generating widespread participation in politics by informed, productive and “professional” people rather than by amateurish and occasional participants.

In general, it seems reasonable to believe that the quality of political participation depends, among other things, on the quality, the quantity and the accessibility of the relevant information available, on participants' cognitive, communicative and interpersonal skills (which in turn depend on their cultural and political background), and on the features of the tools used in the activity.

Anna Carola Freschi correctly points out that “ one of the reasons for the backwardness and impasse in the e-democracy experiences aimed at fostering citizens' participation in the decision-making process is the lack of motivation on the part of public actors who deny or reject its importance by simplistically countering the argument of citizens' participation in democracy through representative institutions”⁴. We believe, however, that this explanation can only account for one aspect of the problem. The idea of public participation in governance needs not only the acknowledgment and the attention of politicians but also adequate and effective tools to reconcile a wider, “pluralist” participation in democracy with rigorous and mature policy making. This policy formulation should not be in conflict with institutional political representative bodies; on the contrary, it should be able to put forward ideas and proposals that are well thought out, informed and, borrowing an expression used in logic and computer science, “ well formed” .

In the law making process, a wider participation in the formulation and drafting of rules can produce the most interesting results. On the one hand, the crafting phase is, at the

³ *Id.* at 12.

⁴ “tra i motivi cruciali del ritardo e della *impasse* in cui si trovano le esperienze di e-democracy centrate sulla promozione della partecipazione dei cittadini ai processi decisionali è senza dubbio la insufficiente motivazione degli attori pubblici, che o non ne riconoscono il significato, o lo rifiutano contrapponendo in modo semplicistico la logica della partecipazione dei cittadini a quella strettamente istituzionale della rappresentanza”, [The translation is ours] in Anna Carola Freschi, *E-democracy e politiche per la partecipazione dei cittadini*, “Economia e politica industriale”, n. 121, 2004. This paper is available online from http://servizi.regione.toscana.it/partecipazione/img/getfile_img1.php?id=7667 in the portal devoted by the Tuscany region to the subject of public participation in democracy.

moment, the least transparent element, because it depends almost entirely on politicians and because it is exposed to lobbyists' pressure which might not be exerted with the right methods and motivations. On the other hand, it is this very phase that transforms a legislative measure from an abstract concept into a document which is a product of rational negotiations of ideas and positions and which aims at attaining goals desirable for the community. It is in this phase, therefore, that political debates can and must become rigorous, rational and reasoned discussions. They are the most authentic forms of political participation, but, unfortunately, not the most frequent.

One of the fundamental features of our project, besides the specific features of the proposed tools, is the attention we would like to focus on the importance of the formulation and drafting phase of the law making process. We must stress, however, that we are not in any way suggesting an interpretation of public participation in democracy as something exclusively relying on the use of the web and the new technologies. We rather suggest using a specific tool that has advantages and disadvantages like many other available and desirable tools. We would state, indeed, that public participation in democracy needs by its very nature a variety of tools and forms of access to ensure openness and long-term sustainability without binding its destiny to a single technology or organization.

We know that in this context the use of the new technologies causes problems of exclusion due to the digital divide. However, the cultural, technical, and legal gap that makes law-making forms and places inaccessible to most citizens is surely wider than the divide due to the use of web technologies (civil society is usually more technologically advanced than its politicians). The best way to bridge to the digital divide is not to ignore the possibilities offered by the new technologies but to work to guarantee their maximum social, economic and cultural accessibility.

2. IT and Web tools to draft documents

In order to explain our idea from a practical point of view, we need to abandon the political discussion for a while and focus on the Web world and its tools.

Although the ITC sector is very young, it already has a history and its evolution is marked with different steps and phases that at times may correspond to ephemeral trends and at others to really innovative ideas and technical tools. The cultural and social importance of this innovation does not lie, however, in the mere novelty of the technologies, but in the changes that their use can foster within the forms and boundaries of the "*spaces of possibilities*" where each one of us, and society as a whole, operates.

Technology does not offer deterministic solutions but works as a framework that opens (and sometimes precludes) certain possibilities.

2.1 The new Web

In the Web world, "hot" innovations are linked to two expressions that might be both considered unsatisfactory for several reasons: *web 2.0* and *semantic web*.

As is often the case, rather than explaining single, specific and well defined developments, these two expressions refer to quite confused and heterogeneous tool sets and to trends characterized by "family resemblances". All these tools allow the identification of new "spaces of possibility" which share to some extent common views and boundaries. We can mention what seems to be the basic feature of these trends: the transformation of the Web from a simple platform for sharing and linking contents into a tool – or rather a set of tools – allowing collaborative content authoring. This collaborative authorship partly relies on computer programs and automatic procedures and partly depends on users' interaction and information sharing.

This development seems to spring from three key factors:

- 1) the possibility of inserting and managing standardized metainformation intelligently;
- 2) the willingness (which precedes the possibility) to transfer many document writing activities from the PC's "closed space" to the Web "open space" allowing access not only to the final outcome but also to the intermediate stages of the creation process;
- 3) the possibility of cooperatively selecting, evaluating and filtering information – also by using specific software tools.

A significant portion of the "new Web" relies on these factors and we will go on to discuss these after a brief description of the tools we intend to use.

2.2 Towards collaborative document writing

As we said, we are interested in collaborative document writing. To explain what this is, we will give some practical examples.

The most traditional and widespread example of document creation is the production of textual documents. Normally, this kind of document is written by using a Word Processing program (such as Microsoft Word) that helps the user throughout the writing process from the first draft to the final version. Word is installed in the writer's PC and, therefore, tends to "close" the authoring process. Moreover, the fact that the new versions of a document normally replace the old ones by overwriting them tends to erase the traces of a writing process which is often complex and tiring. The polished surface of an electronic text covers and hides revisions, corrections and second thoughts⁵.

The traditional Word program is a functional and adequate tool fitting many purposes. It is not so, however, when texts require more open and increased forms of shared authorship, or when we need to keep the authorship of the writing and of the editing stages separate, and/or when we want to keep track of the different writing phases.

⁵ Using a picturesque image, Giorgio Raimondo Cardona compares the surface of an electronic text to the skin of mythical heroes: it regenerates at every new wound. (See D. Fiormonte, *Scrittura e filologia nell'era digitale*, Boringhieri 2004, pp. 65 ff).

Most word processing programs offer some solutions to these problems: it is possible to save different versions of the same document under different names – however, we rarely do it, even when the nature and the importance of the written document would require it – and there are specific commands, such as the Revision option – that allow users to store remarks and amendments suggested by different editors. These tools are useful but still limited in their potential: the number of people who can participate in the editing process is still restricted (they are rarely more than two or three); the original author is entirely entrusted with the usually occasional and unplanned circulation of the document; the possibility of discussing edits is provided by external tools which are different from those used to write the text; the records of the whole writing process disappear when edits are accepted or rejected.

The increasing use – especially in business organizations- of Documents Management Systems (DMS) represents an improvement as it may avoid the shortcomings of standard word processors. These platforms⁶ allow users to share in a well planned way documents produced with traditional IT tools designed for individual use, and let users keep track of their workflow. When requested, the platform “releases” the document to single contributors avoiding the overlap of different versions or allowing users to manage them and keep track of the edits by saving different and subsequent versions of the document. The platform guarantees contributors’ secure identification and often integrates collaborative writing tools that facilitate discussion (such as messaging services, audio and video conferencing, etc.)

By nature, however, DMSs usually seem to suit relatively closed teams and writing activities performed in business environments or in existing, highly structured organizations. Moreover, a productive use of these tools generally requires some sort of complex, specific training and all the participants in the writing process each have to possess the necessary applications individually in order to create and amend documents.

This is impossible with Web-based applications residing in the server rather than in personal computers. In this case, writing and editing programs are used “at a distance”: by logging into the server, the usual web browser (Firefox, Internet Explorer, Safari, ...) becomes the kind of program we want to use (word, spreadsheet, etc.). The files produced by using Web- based programs are normally saved on the distant server and are always available from any computer with an Internet connection and a browser. Obviously, these web-based applications⁷ have user identification systems and often offer tools to share documents and contribute to their creation. However, these tools are often similar to those available in PC programs, such as the above mentioned Revision option and, therefore, cannot suit wider forms of collaboration. Furthermore, even web-produced documents are not real web pages: their consultation is limited to the users who have registered with the platform, unless they have decided to publish their documents on the Internet in other

⁶ The most popular DMSs are, for instance, those based on the use of Oracle or Microsoft Sharepoint platforms.

⁷ Among the most popular web-based applications, it is worth mentioning Writely, which has recently been bought by Google and has become part of Google Docs & Spreadsheet (<http://docs.google.com/>), and Think Free Online (<http://www.thinkfree.com/>).

ways (for example, Google Docs allows users to transfer texts to a blog, but it excludes collaborative writing).

2.3 Wiki tools

It is clear that, for different reasons and despite their unquestionable usefulness in different situations, none of the tools that have been discussed so far can be used in a wider project of collaborative text writing. For the kind of project we are proposing here, we need:

1) a platform offering all the advantages of web-based applications (this would free the users from the need to possess specific programs except for a normal web browser): the ease with which weblog writing tools can be used; the possibility of recording the different stages of the writing process; web-based access to the writing tools and to the texts produced as a result of their use.

2) Moreover, the platform should be able to:

- allow a good description of the texts produced (metadating);
- offer efficient tools to discuss, cooperatively filter and assess consensus in order to assist the negotiation of a collaboratively written text and, in the case of specific law texts, help “build” documents correctly, move them directly in the appropriate XML format⁸, and allow the collaborative integration and enlargement of a significant collection of documents (with a repository function).

Such an objective probably requires the integration of different tools in a single platform. Wiki applications are a web-based application typology that seems to meet at least the requirements mentioned in point 1.

Web sites created in Wiki platforms allow users not only to read but also to add and modify contents very easily. A Wiki page is displayed by the browser and indexed by search engines like any other web page, but it also usually offers a direct link to the edit option. By accessing the edit section, any visitor can edit, delete or add contents to the page. The platform keeps track of the edits and let users retrieve the previous versions of the text if they want to. The possibility of editing the page can be made available to any user or be restricted to registered ones.

These features⁹ make a Wiki site an extremely powerful tool for writing texts collaboratively, but expose it to easy vandalism and bad edits. However, the most popular Wiki site, Wikipedia, demonstrates that although these risks still exist, they can be countered.

This is not the place to present a detailed discussion of the Wikipedia project, which aims, as is well known, at a collaborative creation of a Worldwide Web Encyclopedia.

⁸ For law texts in XML format see the documents available in the portal Normainrete (http://www.nir.it/cgi-bin/sito_vis_standard?id_stan=321&CODICE=ap_stan_rappresentazione_xml)

⁹ For a detailed description of the features of a Wiki site and its management software, a good starting point is the Wikipedia entry “Wiki” (<http://en.wikipedia.org/wiki/Wiki>.) A more complete and complex discussion is available in Anja Ebersbach, Markus Glaser e Richard Heigl, *Wiki: Web Collaboration*, Springer 2005.

Undoubtedly, a completely open authoring process, which is central to this enterprise, runs the risk of being vandalized, and of being unreliable, unauthoritative, inaccurate and disproportionate in the way it covers some topics - these risks and many more, including the difficulty in using ever changing entries, have been discussed in several articles¹⁰. However, it must be said that Wikipedia has exceeded an unprecedented 6 million entries in 250 languages (there are more than a million and a half entries just in the English-language Wikipedia), and it offers a broad and rich source of information, which is often valuable and accurate¹¹ (date: January 2007). This result shows that even a completely open authoring process like Wikipedia can be useful and productive. However, it is also possible to use open access collaborative writing forms that are a little more controlled than those used by Wikipedia. Moreover, in the project we are presenting here, which concerns collaborative law crafting, the end product would not be a law text but simply a proposal that would be subsequently assessed and scrutinized by the institutional personnel entrusted with the law making task.

3. Collaborative writing for citizen participation in law making: a project

We propose the creation of a platform centred around a Wiki website, provided with specific discussion tools and with an open repository for the online provision of relevant information. This would help interested citizens to participate in collaborative rule making. The draft laws created by users of the platform would be made available to representatives with real law making power and would represent a contribution to the law making activity without altering traditional formulation and deliberation procedures.

Let us see in further detail how this goal could be achieved. We will describe a possible structure for an online tool with the above mentioned features in order to articulate the necessary steps required to create such a prototype.

3.0 The conceptual framework

The creation of an online tool allowing collaborative law drafting and public discussions of law initiatives (and regulatory measures) is at the core of our project. This tool should allow one or more individuals to propose, discuss and craft a complete legislative measure. Ideally, Members of Parliament and other subjects with legislative power will be able to draw on this database of draft laws – if they consider it useful- and decide to use the ideas developed by online contributors in law making contexts and above all in parliamentary debates.

Several elements are in favour of online collaborative law drafting:

- Publicization of the legislative initiatives;

¹⁰ A detailed list of the criticisms and problematic aspects of the project is contained under the Wikipedia entry "Criticism of Wikipedia" http://en.wikipedia.org/wiki/Criticism_of_Wikipedia. Cf. <http://en.wikipedia.org/wiki/Wikipedia> as well.

¹¹ In this regard, a telling episode is the 2005 dispute between the prestigious international journal *Nature* and *Encyclopedia Britannica*. The dispute started with an article published in *Nature*, which compared Wikipedia entries' accuracy to *Encyclopedia Britannica*'s. For links to the corresponding articles see the webpage <http://www.nature.com/nature/britannica/index.html>

- Transparency of the drafting process;
- Intersubjective validation of the proposals: other contributors' feedback can provide information about the validity and feasibility of a proposal;
- Qualitative improvement in legislative initiatives: the quality of the proposal can be improved by other contributors' experience, ideas and writing skills;
- Provision of spaces aimed at the dissemination of accurate and reliable information, and where the political views of civil society can have a voice and undergo public evaluation¹².
- Multilevel operability: people with law making power can monitor and contribute to the crafting phases – this would narrow the gap between the civil society and its politicians.
- Critical mass: a centralized tool where norm-making activities converge will build momentum and attract more activity.

3.1 Structured and unstructured approaches: the “bifurcation” problem

As to the drafting procedure, we can distinguish between two approaches:

- a structured approach with a controlled workflow. In this case, the proposal is evaluated and its formulation is monitored with the experts' help throughout its editing phases. The strength of the structured approach is the expected quality of the end product.
- an unstructured approach with the mere availability of a Wiki tool for collaborative authoring. The tool should however guarantee a centralized collection of the contributions and should be reference for online collaborative production of draft legislation. In particular, the existence of a draft laws repository that is open, accessible and without special constraints can enormously enhance public participation.

Arguments for and against either approach are not conclusive at this stage. A relatively unstructured approach, like the one adopted by Wikipedia to create online informative contents, is clearly successful and remains an irreplaceable reference. Nevertheless, it is not possible to establish a priori if this model can be directly and effectively applied to online rulemaking¹³. An obvious difference is that while an entry

¹² As is well known, the civil society already voices its opinions via legislative measures crafted by associations, lobbying activities, and referendums. Some of these associations draft the measure, and get the signature of the parliamentarians who become the movers of the legislative initiative. For an example, see the Italian case of ADUC draft law on users and consumers' rights (<http://www.aduc.it/dyn/storia/proposta.html>). However, the organization of this activity is usually occasional and devoid of adequate tools of visibility, discussion, and intersubjective validation.

¹³ On the other hand, the relatively low structured feature of Wikipedia entries has been questioned by the supporters of a more structured approach demanding, among other things, the collaboration and the guidance of editors and experts.

in an encyclopaedia normally aims at being correct and accurate in the description of the facts that are considered as data, a legislative initiative is the result of political choices and opinions over which there might be some disagreement. Therefore, it implies the possibility of expressing different opinions. It is not by chance that the Wikipedia encyclopaedia model allows only one entry on any given subject (for example "Jupiter's satellites") and there is no provision for two or more conflicting opinions. Any conflict existing during the discussion phase must be resolved before achieving the creation of the entry that wants to be an accountable and authoritative reference. Quite differently, a draft law reflects a group's interest and, during the deliberative phase, the political mediation becomes similar to an editorial board's negotiation. It can lead to the settlement of the conflict over a rule that, hopefully, concerns the common good, and to the achievement of a sufficiently wide consensus, thus minimizing arbitrary decisions and abuse of power.

We do not want to suggest that the formulation of scientific content is radically and inevitably different from that of legislative content. In both cases, dissent, criticism, and alternative hypotheses are important, and, in both cases, facts that constrain the relevant hypotheses must be taken into account. However, conflict resolution occurs in different places and forms, and collaborative tools can mirror these differences through the different procedures offered to the users.

A collaborative law drafting tool should provide for the possibility of "bifurcations" that allow independent production of different proposals regarding the same issue when consensus is missing, and that also allow different proposals to converge when editorial negotiations reach an agreement about the same text. For example, two groups may formulate different proposals on a sensible issue, and the tool must take into consideration these differences allowing each group to develop their individual proposal thoroughly. Moreover, two proposals that have been developed separately might turn out to be compatible and reconcilable in a common legislative project. Even if our tool offers the possibility of discussion and editorial negotiation, it normally defers the settlement of the most prominent different positions to an offline place belonging to the sphere of political mediation (Parliament or other policy or decision making places). In Wikipedia, on the contrary, even hard-won consensus is always reached within the website.

A rigid structuring of the workflow and the contribution of qualified editors might help manage the bifurcations when normal editorial negotiation is unable to reconcile different positions and reach a consensus about a text. However, a very structured approach might be unworkable during the organizational phase, or it might discourage potential participants. In particular, the backoffice activity might be seen as a potential ideological filter. In order to avoid this problem, it would be necessary to ask participants to issue a declaration of intent, sign a "code" of Ethics and clearly understand the editorial tasks they have been assigned.

In this paper, we do not take a stand in favour of or against either approach, but we point out the general requirements for the two typologies.

3.2 The “engine”

The writing “core” of our tool consists of: 1) a wiki for collaborative text writing and incremental discussion; 2) a simple CMS (for example, Blogware) to disseminate immediate information on proposals that have been submitted, progress made in the writing process, and integration of useful documentation, and to host general contributions; 3) a repository tool (preferably, an Open Archive) to insert, describe, store, and retrieve relevant documentation, final versions of texts (or their alternative versions) and texts whose development has been abandoned. The coordination of these three tools would be assigned to a collaborative backoffice.

The choice of these tools has been determined first of all by the necessity to use software and functionalities already familiar to potential users, and, second, by their complementary functions. Wikis, blogs, and open archives are widely used to format online content, and are extremely flexible in their access design.

3.2.1 Wiki functionality

The principal tool function, the creation of law initiatives, is provided by the Wiki. As a collaborative writing tool, it allows users to create a shared text progressively, to keep track of the edits and discuss them in specific discussion pages, as happens in the Wikipedia model. The Wiki is entrusted with the editorial negotiation that includes both the formatting of the text and its accurate discussion.

Generally speaking, we intend to promote an authoring process that is as open as possible, and that can enable all interested users to contribute with revisions and proposals. However, in order to guarantee an effective authoring process, it will probably be necessary to implement a user registration and authentication system. Further mechanisms to filter, verify and monitor edits will be discussed shortly with the description of a model for a structured approach to collaborative work.

Mechanisms to control and limit vandalism will definitely be necessary. Wikipedia experience teaches that vandalism is a serious problem that can, however, be limited and offers ideas and methods that have already proved to be quite effective. The political character of our tool makes us believe that the vandalism problem should be faced; however, the “bifurcation” possibility and the formulation of alternative projects might channel dissent towards constructive law drafting rather than destructive behaviour and vandalism against disputed proposals.

3.2.2. Wiki and weblog

One of the advantages and, in some ways, one of the limitations of the tool is that a Wiki document is ever changing and, therefore, it is not possible to take an easily retrievable “snapshot” of individual contributions. This deficiency will be remedied by “dynamically freezing” the best versions (see below) and by using the weblog as a tool for macro-discussions that are not centred on editorial negotiation of proposal excerpts but on the formulation of more general issues and positions. This goal might be achieved by devoting weblog sections to the discussion of specific issues and distinguishing the weblog area used for “journalistic-like” updates about the

development of the different projects from that devoted to the expression and discussion of positions and ideas.

It must be said, however, that despite the availability of spaces and specific forms of more general discussion, our proposal here specifically regards the discussion and collaborative production of draft laws and, as such, does not aim to provide solutions or tools that might have a functional role in *any* form of political debate. We believe that anchoring political debate in texts and documents is rational and productive, but we certainly do not wish to exclude the possibility of wide-ranging discussions on fundamental beliefs and values even when they are not linked to specific rules and legislative initiatives. However, these discussions are not the main focus of our attention, and on this specific aspect, the tools examined so far might not be the optimal solutions.

3.2.2. Documents and proposals archive

One of the main goals of our project is to enable users to write *informed* proposals. Therefore, it is of paramount importance that the tool enable text writing and the collaborative collection and use of relevant documentation: e.g. other countries' legislation on cognate issues, law drafts that have been introduced in other places, articles and experts' contributions, etc. Some of these contents might even be produced directly by users participating in the platform collaborative work.

The most suitable tool for collecting, describing, storing, and searching this material seems to be an open archive compliant with the OAI-PMH standard. An Open Archive capable of managing multimedia information, like DSpace¹⁴, could allow the insertion and the availability of audio and video contributions (debates, conference papers, etc.). The metadata of this Open Archive should include a way of hyperlinking to the Wiki page containing the proposal or the proposals that are considered relevant to the case; likewise, the Wiki should link to the archive.

Moreover, as we will see, the Open Archive would mean that proposals or versions that are considered "closed" because their formulation has been completed or abandoned could be collected and made available.

4. An online workflow of draft laws: a structured approach

As we mentioned earlier, there is a difference between a structured and an unstructured approach to the authoring activity. To explain the way our tool works in a structured approach, we can consider the stages a proposal passes through from the simple idea to its publication and its possible use. In the following section, the roles of the different contributors to the site are explained and marked by a capital initial.

4.1 The Promoter

Let us imagine the case of a Promoter who has identified an issue or has an idea about a legislative initiative. For instance, let us imagine that a Promoter sends to the online archive the following suggestion:

¹⁴ Cf. <http://www.dspace.org>

Problem : we are moving into a service economy, as the population is aging. Therefore, there will be a greater need for domestic workers. However, employment contracts for this kind of jobs can be discouraging for any private employer (because of complex administrative procedures for the payment of social charges, etc...). As a consequence, the underground economy triumphs.

A solution to the situation, like that which France has been applying for several years, is the so called "cheque -emploi -service" (CESU): the Bank works out the contributions and the employer is awarded a tax rebate.

Practically, if Lucy pays € 500 a month for a service worker (a carer or a domestic worker), she gives the worker a € 500 cheque. The bank clears the cheque and deducts € 200 from Lucy's account for social security payment. Lucy declares € 500 in her income statement. By taking contributions into account, tax authorities calculate € 700 and give Lucy a € 350 tax refund.

Advantages to Lucy:

- 1 Lucy spends € 350 for a service worth 500 Euros;
- 2 Lucy does not have to fill in any administrative form, to queue to pay social charges, etc. She only has to draw a cheque;
- 3 insurance policies cover accidents at work because the workers' papers are in order.

Advantages to the worker:

- 1 the worker is legally employed and has social security benefits;
- 2 he/she is insured in case of accidents at work;
- 3 his/her job is regularized and "dug out" of the underground economy

Advantages to the State:

- 1 regularization of the off-the-book employment;
- 2 partial recovery of the tax rebate by taxing the employee.

We mentioned this case to provide an example of the motivations that might lead a citizen to suggest a legislative measure. He/she might be an individual who lived abroad for a while and believes that this kind of administrative simplification might be introduced in his/her country of origin as well. Promoters can also be consumers' associations, trade unions, and politicians.

4.2 A Workflow model

4.2.1 First phase: the "Welcome" phase

The site offers the proponent a database of the proposals (Repository) and a tool to upload a new proposal. The Promoter is invited to consult the Repository in order to maximize the probabilities that his/her proposal is taken into consideration. After an initial screening, the proposal is logged and analysed in terms of feasibility. More specifically, the first phase of the workflow might be structured with the following phases:

- Registration

- to use the site actively visitors must register into it
 - Repository
 - the site should provide a database of preliminary proposals like the one in the example, that shows the type of issues and ideas that are worth further development.
 - Upload
- a tool allows the proposal to be uploaded on the site
 - Preliminary screening
- promoters' preliminary proposals are examined by the Editorial Board in order to avoid cases of lack of pertinence, vandalism and unfeasibility
 - Recording of the proposal
- if the proposal complies with the minimum requirements as set out in the examples and the database, it is filed with a progressive number and a date. Eg. 2007.01
 - Feasibility assessment
 - the proposals that have been recorded are considered feasible if the Editorial Board does not find formal or substantial limitations to their further development during the preliminary screening (e.g. cases of evident unconstitutionality). Once contents are considered suitable for a proposal, they are not assessed from a political point of view. Feasibility can be assessed collaboratively through Editorial filtering.

4.2.2. Second phase: First draft

Once the proposal has received preliminary approval, the promoter is invited to prepare a first draft of the project, following the model of an Annotated Canonical Example and asking for the help of a Tutor if necessary. Once completed, the first draft is archived and inserted into the Wiki for the collaborative writing process.

- Annotated Canonical Example

The annotated canonical example has the function of helping the user write a first draft by exemplifying the structural and editorial features of a law text (subdivisions in articles, cross-references to current legislation, etc.). This method is similar to that used by international scientific journals¹⁵ and has the side effect of selecting motivated Promoters because proposals must be formulated with care.

As a matter of fact, it is the Promoter who formulates the core of the First Draft: he transforms his idea into a rough document where he can leave blanks if he does not feel competent enough.

¹⁵E.g, Nature: cf. http://www.nature.com/nature/authors/gta/Letter_bold_para.doc

- Tutor assistance

The project may include a network of Tutors (for example, students and Law professors, volunteers interested in the project and with legal or institutional experience) whose expertise is generic but sufficient to find and convince more experts to support the Proposal.

- First Draft Writing

The Tutor, who might be entrusted with the supervision of more than one proposal, cooperates with the Promoter. The Tutor assists the Promoter in writing the First Draft and gets in touch with the contributors and the experts who might help formulate it. The document which is the output of this activity is a draft law (First Draft).

- First Draft Publication

The first draft is inserted into a specific section of the repository (in a frozen, unchangeable format) and numbered with a unique, non redundant identifier. It is simultaneously inserted into the Wiki for the collaborative writing process.

4.2.3 Third phase: Documentation, public discussion and Versioning

Registered users can directly and actively use the site in various ways:

- To insert into the documents repository the material that is considered useful to write a better draft law (law source, foreign legislation, articles, essays and bibliographies). It is reasonable to assume that the Proponent and/or the Tutor will start collecting this material.
- To edit the text or create alternative versions (Variants) by using the Wiki when the discussion intimates a bifurcation of proposals. Once they have been sufficiently developed, Variants can be real alternatives to the First Draft or become substitutes for it if the necessary consensus is achieved during editorial negotiations. Different versions will also be given the possibility of converging in one variant (variants of "convergence").
- To discuss the First Draft and/or its Variants within a specific discussion page; explain edits and additional content; introduce cross-references to existing laws; point out incompatibility issues, raise objections of unconstitutionality; compare foreign and European community legislation, etc., and use the weblog for general commentary and discussions about the philosophy of the proposal and its economic, social and moral context.
- The users who are interested in following the authoring process will also be given the possibility of working in groups on specific issues with the creation of a "bottom up" accountability system (peer feedback). The system might also allow these groups to create specific working tools by using discussion forums and forms of collaborative work such as Moodle.

- The informative section of the weblog will be used to disseminate information about the different phases of the authoring process, the negotiation of an agreement on a text, the bifurcations and the converging versions (variants), etc.

The output of this phase comprises: a Final Text based on the First Draft and/or edited or alternative Variants available in the Wiki; relevant discussions made available in the Wiki discussion pages or, in case of more general discussions, in the weblog and a collection of relevant documentation available in the repository.

Accepted versions are published and archived in a frozen format when they reach their optimum. The process can continue indefinitely or be completed within a certain time limit (to increase collaboration effectiveness). The Final Text and the frozen Variants are numbered (eg. 2001.01 Version 01) and inserted in a specific section of the repository to serve in the future as documentation and as a source of inspiration for institutional subjects with an interest. During their insertion into the repository, the Final Text and the Variants will be semi-automatically converted into an XML format that is specific to law texts. This will be done by complying with the available standards¹⁶ and, if necessary, by using specific editorial tools.

5. Online workflow of draft laws: an unstructured approach

If compared to the structured approach, which we have described in the previous section, the unstructured approach lightens the load of the backoffice. However, we recommend that users should be registered and entrusted with the selection and filtering of the proposals and that there should be no provision of a structured editorial board. Decisions regarding tutors presence and identification and the specific articulation of the workflow should lie with the participants' autonomous organization and might differ for each proposal.

The mechanism to be used to collect documents, negotiate text drafting and develop alternative versions and changes remains unaltered. When no official editorial board is provided for, it may be extremely useful to introduce mass collaborative filtering tools that help achieve consensus. However, we also think it useful to make editing tools and one or more annotated canonical examples available.

6. Philosophy and advantages of the present proposal

In this section, we intend to show how our proposal (in either form: structured or unstructured) can meet the requirements for a public discussion of law-making activities and might also suggest other requirements that are likely to determine significant changes in public decision-making and discussion practice. The requirements of transparency, openness, sustainability, and documentability constitute a set of interrelated properties that are not independent but mutually supported and naturally implemented in the tool we have described.

6.1 Transparency

¹⁶ Cf. the instructions provided by the site Normeinrete, which has already been mentioned.

Transparency in the writing process is a requirement that, if satisfied, would enormously strengthen our project. Law making opacity is particularly unwelcome for the way the drafting activity is performed. Whilst the reasons a politician takes a stand and votes for or against a bill may be perfectly understandable, sometimes the reasons a bill is drafted a certain way remain a perfect mystery. Significantly, politicians have a surprise reaction when they realize that a bill that has been approved contains elements that seem to be beyond the control of its movers and sponsors.

In this regard, the possibility of retrieving prior versions of a text created or edited by registered users guarantees the transparency of the editing process, because any modification is archived and its author is traceable.

Transparency is also a function of an open system.

6.2 Openness

The choice of tools whose source code is open (in the public domain) entails some direct and indirect advantages.

The knowledge and openness of the code allows control over its application; it also encourages users to trust the tool because there is no risk that the tool will be "diverted" by those who both own and manage the code .

Moreover, the full availability of the documents used to write the draft laws helps to rationally assess, freely disseminate, and discuss the proposals beyond the editorial platform. In particular, the use of OAI-PMH (Open Archives initiatives Protocol for Metadata Harvesting) by the repository allows for easy content search also by employing centralized and independent harvesting search services (service providers).

6.3 Sustainability

The use of publicly accessible tools has some advantages for its management:

- Limited costs (which only include labour costs and the costs of a server acquisition, software installation, and customization)
- Immediate access from any Internet-connected workstation
- Product usability: the user is already familiar with products of this kind, like Wiki, Blogs, open archives. Therefore, tutorial sections can be simple, practical and effective.
- Possibility of teleworking for managers and editors.

6.4 Documentability and versioning history

The system provides a means to keep a record of every phase of the writing process and the revisions made. This "change log" is easily accessible both to online contributors and interested citizens. Moreover, as has already been mentioned, the availability in the platform of additional information and of the legislation that has been used as a source provides the documentation and the frame of reference of the

editorial choices. In this way, the intersubjective verification of the results of the drafting activity is extremely easy.

6.5 Documentability

The history function is not the only function linked to documentability: even if it represents an important element. A written track offers further cognitive feedback. For example, it allows users to become more aware of their responsibilities for any contribution they give at any level. It also facilitates text building and improves argumentative rigour. In our case, it tends to transform a political negotiation, or at least a part of it, in an editorial negotiation, clarifying the different positions and their implications.

These properties are not automatically applicable: they require adequate tools. For example, the use of a simple discussion forum induces participants to express their opinions regardless of their pertinence to the collaborative project. The fact that the discussion is strictly focused on the text improves its pertinence and increases its importance. The tool design must be able to direct and focus contributions on an agreement about a text that is structurally and formally correct and sustainable and practical as to its content.

The same can be said for the tools that store and allow access to the texts and the documentation. It is not enough to write a good text: it is also necessary to describe it adequately through efficient metadata systems that help retrieve and reuse the text, to apply codification formats that permit interoperability, and to guarantee interface accessibility and usability. Only if these conditions are fulfilled, will both users/editors and politicians interested in introducing and promoting collaboratively written legislative measures be able to use these tools efficiently.

The tools used in our project should be aimed at writing good draft laws in an open, collaborative, transparent, sustainable, and accountable way, and at storing, describing and making these draft laws easily searchable and accessible. The specific nature of these goals justifies our choice of certain tools: we believe that these tools will create a working environment that will enable the achievement of the envisaged results and will contribute to the creation of new and socially productive forms of public participation in democracy.